

Abstract

Whilst clinical eating disorders are relatively uncommon in children and young people, a much larger proportion are thought to experience subclinical difficulties with eating, termed 'disordered eating'. Given that the issue is so widespread and many young people experiencing disordered eating do not meet the criteria for specialist eating disorder services, schools have a responsibility to work systemically to reduce the prevalence of these difficulties. Educators may be able to use some of the risk factors for disordered eating, including body dissatisfaction, parental pressure to lose weight, peer influence and internalisation of food rules, to inform preventative strategies. These strategies may include, but not be limited to, implementing curriculum changes such as teaching about body image and nutrition education in developmentally appropriate ways, as well as considering whole-school policy changes such as specifying weight-related victimisation in the school's anti-bullying policy and deliberating the school's involvement in national child weighing schemes. Taken together, schools have the potential to play a critical role in reducing disordered eating in children and young people. Educational psychologists are well-positioned to raise educators' awareness of disordered eating and support senior leadership teams implement these preventative strategies in an evidence-informed way as well as considering the role disordered eating might play in their own casework.

What role should schools play in the prevention of disordered eating in children and young people?

In the United Kingdom (U.K.), approximately 0.4% of young people between 5 and 19 years old are thought to be experiencing a clinically significant eating disorder (ED; NHS, 2018), such as anorexia nervosa, bulimia nervosa, and binge eating disorder. Although the prevalence of diagnosable EDs is thought to be under-detected in research and clinical practice due to the tendency for those suffering to hide their disorder and avoid seeking help, it is still likely a very small minority of children and young people (CYP) who are affected. However, this does not mean that CYP who do not meet the criteria for an ED have a healthy relationship with food. Researchers have suggested that eating attitudes and behaviours should be viewed on a fluid continuum, with clinical EDs at one end and asymptomatic attitudes and behaviours at the other (Mintz et al., 1997).

In between the two poles lies the term ‘disordered eating’ (DE), which constitutes a variety of behaviours (e.g., significant dieting, skipping meals, binge eating, self-induced vomiting and cycles of bingeing and restricting) and attitudes (e.g., preoccupation with weight and body size and shape concerns) at a less severe, sub-clinical level than diagnosable EDs (Goldschmidt et al., 2008; Neumark-Sztainer, 1996). DE represents a growing public health concern; the prevalence of weight-control behaviours and inflated weight perception is substantial in the U.K., with one large cohort study finding that 42.2% of adolescents were actively trying to lose weight in 2015 compared to 29.8% in 2005. Furthermore, adolescents were also more likely to report themselves as being overweight in 2015 than in 2005 (Solmi et al., 2021). Importantly, these findings were adjusted for body mass index (BMI) and so increases in obesity levels between the two cohorts cannot account for the increases in weight-control behaviours and inflated weight perception. Similarly, another study found that 31.6% of adolescents experienced DE, comprising of fasting, ‘crash’ dieting, vomiting, and

using medicines to avoid losing or gaining weight (Sparti et al., 2019). Clearly, difficulties with eating extend much further among CYP than solely those diagnosed with an ED.

The effects of DE on physical and mental health outcomes are adverse and enduring. DE can lead to increased anxiety, smoking, drug use, self-harm, weight gain, and lower overall educational attainment (Bornioli et al., 2019; Sparti et al., 2019; Tabler & Utz, 2015). DE is not simply a phase that children and adolescents move past; those demonstrating DE attitudes and behaviours in adolescence show similar or even more significant behaviours in young adulthood (Neumark-Sztainer et al., 2011).

At present, CYP must typically meet the criteria for a clinical ED to receive support from the National Health Service (NHS) in the U.K., with DE generally falling outside of this cutoff (NHS England, 2015). Consequently, educational settings hold a critical position in preventing DE in CYP given that children spend approximately 25 to 27.5 hours per week at school (Long, 2019) and such a large proportion of children appear to be suffering from these eating difficulties. Educational psychologists (EPs) are well situated to support schools to consider systemic factors within and beyond the school environment that may contribute to DE behaviours and implement changes at various levels to reduce the prevalence of DE in CYP (Elms & Higgins, 2022).

Aetiology of DE

The aetiology of DE is multifaceted and differs between individuals but research suggests that there are common risk factors that might increase the likelihood of DE developing (Littleton & Ollendick, 2003). Broadly speaking, these variables can be separated into individual, societal, and familial risk factors.

Individual Risk Factors

Negative body image. One individual risk factor for DE is body image dissatisfaction. Body image is defined as a person's perceptions, thoughts, and feelings about their body, particularly around its shape and size (Grogan, 2010). A recent government survey found that 66% of children in the U.K. feel 'negative' or 'very negative' about their body image most of the time (House of Commons, 2021), suggesting that body image dissatisfaction is prevalent among CYP. Longitudinal research has indicated that negative body image during childhood and early adolescence can lead to DE behaviours and cognitions during mid to late adolescence and beyond, though the effect is stronger for girls than boys (Micali et al., 2015). The mechanism between body dissatisfaction and DE is thought to be two-fold. Firstly, when CYP perceive themselves as not being at an 'ideal' body weight, they may be more likely to engage in dieting and other weight regulation strategies to try to attain their desired shape and size. Secondly, the feelings associated with negative body image may result in dysregulated eating such as bingeing or skipping meals as a maladaptive coping mechanism (Littleton & Ollendick, 2003).

The literature has categorised negative body image as an individual risk factor, but systemic factors may feed into this. One example is that CYP are surrounded by messages conveying societal ideals of attractiveness, promoting the notion that thinness is desirable and should be strived for, also known as 'the thin ideal' (Thompson & Stice, 2001). This ideal, communicated frequently through social media, can lead to body dissatisfaction when it is internalised due to discrepancies between the unattainable images presented and real bodies, leading to psychological distress and subsequent DE in those with higher social media usage (Wilksch et al., 2020).

Familial Risk Factors

Parental Pressure to Lose Weight. A familial risk factor for DE is parental encouragement of their child to lose weight. A meta-analysis examining studies in this area found CYP who were encouraged to lose weight by their parents or were criticised about their weight were more likely to have negative self-perceptions and higher rates of DE (Gillison et al., 2016), thought to be mediated by negative body image and maladaptive rules around food intake (Oliveira et al., 2019).

Parental pressure can even be encouraged in schools through the National Child Measurement Programme (NCMP), a government scheme delivered in schools to measure children's height and weight in both reception and year six to raise parental awareness of their children being overweight via a feedback letter about their child's BMI (Department of Health and Social Care, 2022). Studies show that parental uptake of weight management support for their children after receiving a feedback letter is low, and it is unclear whether this support leads to weight loss (Sallis et al., 2019), suggesting limited evidence for the NCMP as a health strategy.

In addition to its limited effectiveness, the NCMP may also have negative emotional impacts on children. Concerns have been raised about the programme's potential to contribute to DE, given that it creates a context for parents to talk to their child about losing weight. The government has sought to address these concerns through a study that found the programme has little psychological impact on children (Grimmett et al., 2008). However, this research was conducted on a small sample in London schools, and the paper states that 49% of parents either did not respond to the invite or actively opted out, citing worries about the impact of weighing children.

More recent research on larger samples has suggested that parental recognition of their child being overweight leads to poorer mental health outcomes in children, which is

independent of a child's actual weight (Hunger & Tomiyama, 2018; Robinson et al., 2020). Children have reported that they feel anxious and preoccupied about their weight after taking part in the NCMP in year six, regardless of their weight category (Nnyanzi, 2016) and this results in new body and food practices, such as calorie counting and food preoccupation (Gillison et al., 2014; Hawking et al., 2023). Taken together, the NCMP appears to have little positive impact on reducing childhood obesity, though may act as a trigger for DE in CYP.

Societal Risk Factors

Peer Influence. Within schools, CYP feed into weight stigma through social reinforcement; for example, weight-related bullying during adolescence can contribute to body dissatisfaction, and in turn lead to DE (Littleton & Ollendick, 2003; Neumark-Sztainer et al., 2002). The relationship between weight-related bullying, body dissatisfaction, and DE is demonstrated in the literature, with one systematic review noting that binge eating was a common outcome of weight-related victimisation, with dietary restraint, purging and global eating pathology also showing associations (Day et al., 2022). It is also possible that the relationship is bi-directional, with increased binge eating resulting in weight-gain thus further perpetuating weight-related bullying. Importantly, it has been suggested that simply being present in environments where weight-based victimisation is prevalent but not being a direct target can result in increased eating restraint (Guardabassi & Tomasetto, 2022).

Internalisation of Food Rules. Nutrition is a topic that must be taught in schools from key stage one to key stage three, as outlined by the national curriculum (Department for Education, 2013). The guidelines simply state that children should “understand and apply the principles of nutrition and health” (Department for Education, 2013) and so schools have autonomy to design lessons as they see fit. Throughout schools, moral language such as ‘good’ and ‘bad’ are frequently adopted to categorise food (Tan et al., 2019) and children are

often taught that foods such as crisps and confectionary should not fit into a balanced diet at all (Public Health England, 2018).

Teaching nutrition in such a dichotomous way, whereby individual foods fit into certain moral categories, can lead to DE in some CYP (Chen & Couturier, 2019). Nutrition is an abstract topic that primary aged children cannot fully comprehend due to the concrete thinking characteristic of their developmental stage (Lytle et al., 1997; Piaget, 1951). For example, messages in schools around reducing sugar intake due to it being ‘unhealthy’ may be overgeneralised by children and become an internalised rule for avoiding all sugars altogether due to cognitive inflexibility and rigidity to rules present during this period (Tan et al., 2019); these adopted rules may lead to guilt and shame in children and judgement of others if food rules are broken, potentially also followed by bingeing of the restricted food (Fisher & Birch, 1999; O’Dea, 1999). Children with less cognitive inflexibility, weaker central coherence and an increased attention to detail are particularly vulnerable to strict food rules and moral judgements (Roberts et al., 2011; Solmi et al., 2021).

Using Risk Factors to Inform Prevention

Weight-related Bullying Policies

In the U.K., schools are legally required to have published measures to prevent all forms of bullying, such as an anti-bullying policy (Department for Education, n.d.). The government have stated that unless specific forms of bullying are addressed in the policy, there is danger that they will not be properly tackled (House of Commons, 2007) and research for policies directly naming other forms of bullying have proven effective in decreasing their prevalence when implemented at a high level of fidelity (Hall, 2017). It therefore seems vital that weight is directly addressed in bullying policies given that this form of bullying is rife (Neumark-Sztainer et al., 2002).

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It appears that little to no research has been conducted in the U.K. regarding the effectiveness of weight-related bullying policies; this is surprising considering that children in higher weight categories are reportedly 63% more likely to be bullied than other children in Europe (World Health Organisation, 2017). Research on the effectiveness of weight-related anti bullying policies has been conducted in the United States, which may be useful to understand whether these changes would be effective in the U.K., though it is important to note the findings may not be fully generalisable due to potential differences in cultural attitudes to weight. One study measured weight bias in teachers across multiple schools; although educators were more likely to make negative judgements about children of a higher weight, the negative judgements made were significantly lower in schools who specifically mentioned weight-related bullying in their anti-bullying policy (Lessard & Puhl, 2021). These findings suggest that enumerating weight within anti-bullying policies reduces weight bias among teachers, though the study was cross-sectional so it is possible that educators with less negative attitudes towards higher weight pupils were more likely to implement weight-related bullying policies. Overall, settings should consider tweaking their anti-bullying policies to improve staff confidence for tackling weight-related bullying in schools.

The NCMP

Education settings have an active role to play in reducing harm caused by the NCMP given that the scheme takes place in schools. Schools have the choice to opt out of the NCMP (The Body Happy Organisation & AnyBody UK, 2022), which would reduce the potential harm from the scheme. Ensuring children are healthy is of utmost importance for schools and families and so withdrawing from the scheme does not mean the issue should be ignored. Instead, schools may be able to work with families to promote an enjoyable, healthy lifestyle without an emphasis on weight. Research has tentatively suggested that parental encouragement of a healthy lifestyle to promote well-being without explicit mention of

weight may avoid distress and even improve well-being in CYP (Gillison et al., 2016), though few studies have investigated this specific area given that obesity campaigns often target reducing BMI and so further research is needed for reliability. Nevertheless, schools may be able to provide information and education for parents promoting a healthy diet and increased activity levels in children without mentioning weight as a method of decreasing both obesity and risk of psychological harm.

Withdrawing from the NCMP may not be feasible for all schools due to external pressure they face as school participation is considered evidence for a whole school approach to health and wellbeing by Ofsted (Ofsted, 2022). If schools decide to continue the scheme, ensuring it is done in a way that causes minimal harm is critical; this could involve ensuring children are weighed in a private space, discouraging parents sharing weight categories with their children and ensuring positive body image and food practices are promoted throughout other areas of the school (The Body Happy Organisation & AnyBody UK, 2022).

Reevaluating Nutrition Education

Children are concrete thinkers until around 11 years old (Piaget, 1951), and so nutrition education for primary aged pupils should focus on experiential activities that expose children to various foods and their sensory components, including learning where food comes from, how it is grown, exposure to different cultural foods and cooking (Eliassen & Wilson, 2007); food knowledge is constructed from active experiences rather than passively learnt during this cognitive stage (Liquori et al., 1998). Teaching about food in this active way can improve healthy eating and naturally increase fruit and vegetable intake without the explanation that these foods should be 'good' or 'bad' (Peralta et al., 2016) reducing the chance that children will misinterpret and internalise damaging food rules that may lead to DE (Eliassen & Wilson, 2007).

Secondary school pupils are better able to understand abstract concepts but may be more vulnerable to DE as a weight-management method (López-Gil et al., 2023). One method of teaching adolescents about a healthy diet in a way that reduces guilt is through intuitive eating (IE), which involves paying purposeful attention to physiological hunger and satiety cues in a completely non-restrictive way (Hazzard et al., 2021). Longitudinal research has suggested that intuitive eating during adolescence predicts less DE and lower BMI in early adulthood (Hazzard et al., 2021), so increasing CYP's capacity to eat intuitively may be protective against later eating difficulties. Authors have called for IE to be incorporated into nutrition education in schools (Cook-Cottone et al., 2013), but the evidence-base for such interventions with adolescents is still evolving. One small-scale study compared an IE nutrition programme to usual nutrition education in 15-17 year old students and found those who received IE information were significantly more likely to demonstrate reduced DE attitudes (Healy et al., 2015). These findings combined with studies of intuitive eating education in adults (Babbott et al., 2023) are promising, though further robust research is necessary to fully understand its effectiveness. For now, educators could incorporate elements of IE into PSHE or nutrition lessons to complement typical nutrition education and act as a potential buffer to DE until the evidence base has been developed.

Implications for EPs

EPs are increasingly involved in supporting CYP's mental health, including at a preventative level (Price, 2017), which may involve working with DE. The part EPs could play in CYP experiencing DE fits nicely into the five core functions of the role: assessment, consultation, intervention, training and research (Scottish Executive, 2002), as well as elements of the whole school approach to mental wellbeing (Public Health England, 2021).

EPs should consider DE as a factor during assessments and consultations, particularly as it can lead to difficulties with educational attainment (Tabler & Utz, 2015). Whilst it is also possible that EPs could be involved in direct intervention with individuals experiencing DE, this is less likely based on how EP time in local authorities is currently used (Lyonette et al., 2019). However, EPs are often involved in the support of Mental Health Support Teams (MHSTs) in schools, who are well-placed to deliver interventions around healthy eating and body image (Department of Health & Department for Education, 2017) so EPs can guide clinicians within MHSTs to ensure these interventions are evidence-informed and delivered sensitively.

Conclusion

Given the high prevalence of DE and the impact it can have on well-being and educational attainment, schools have a responsibility to reduce the likelihood of its occurrence. Through altering the curriculum to incorporate teaching on building positive body image and developmentally appropriate, non-restrictive nutrition education as well as adapting school policies and practices to reduce weight preoccupation and stigma, schools can reduce the prevalence of risk factors contributing to DE. EPs are well-placed to raise awareness of DE and support settings to implement these changes while also remaining sensitive to DE in their own casework. Collaboration between schools and EPs to create a preventative approach to DE will enable educators to feel better equipped to manage these difficulties and reduce the overall prevalence of DE in CYP.

2993 words

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